

RESPONSE under 37 C.F.R. § 1.116
U.S. Appl. No. 09/750,386

REMARKS

Claims 1-27 are all the claims pending in the present application and all claims stand rejected. Reconsideration and allowance of all pending claims are respectfully requested in view of the following remarks.

OBJECTIONS.

Specification

While never expressly indicated, the Office Action appears to object to Applicant's specification regarding a "Brief Summary of Invention." (8/8/05 Final Office Action pg. 10). However, as no deficiencies have been noted in this regard and since there is no requirement that an application even include a Brief Summary of Invention, Applicant respectfully believes no proper basis for objection has been set forth and requests reconsideration. Applicant notes that the application contents cited in the Office Action, specifies a "Field of Invention" as well as "Description of the Related Art" yet there is no requirement these sections be present in any application. Should the Examiner disagree, Applicant respectfully requests some citation of any regulatory requirement in this regard.

Drawings

Figure 2 is again objected to as showing filter element 57 incorrectly. While Applicant believes its previous arguments in this respect are correct, Applicant will submit a second proposed drawing correction at a time when allowable subject matter is indicated.

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CLAIM REJECTIONS.

35 U.S.C. § 112 (First Paragraph)

Claims 7-9 and 16 are finally rejected under the first paragraph of 35 U.S.C. § 112 as being non-enabling. The Office Action alleges is not clear how the A/D converter + the ASK modulator is reduced to a BPSK modulator or how the oscillator signal is implemented in the modulator. Applicant respectfully submits that the present rejection is improper since the Examiner has not met the burden of showing why Applicant's "presumptively accurate disclosure" would not enable one of ordinary skill in the art to make or use the invention recited in claims 7-9 and 16 without undue experimentation.

Because the claims 7-9 and 16 are rejected, Applicant respectfully submits that it is incumbent on the Examiner to show why these claims, which do not recite either the "1 bit" A/D converter or the BPSK modulator referenced by the Examiner, are non-enabled. Since the limitations in question are not recited in the rejected claims, the rejection does not appear to have any actual bearing on these claims. Further, since the Office Action has not provided any reasoning or evidence why the skilled artisan would not be able to make or use the invention claimed, *prima facie* non-enablement has not been established. See, e.g., *In re Wright*, 999 F.2d 1557 (Fed. Cir. 1993).

Notwithstanding, Applicant submits the skilled artisan readily recognizes that if the output of A/D converter 75 is a single bit, the modulator 90 can be a simple binary phase shift key (BPSK) modulator. That is, more complex modulation is not needed as binary phase modulation can be used where each symbol represents a single bit with a 180° transition between every bit. With respect to the oscillator 65 coupled to the signal generator 90, the signal generator may use the output of oscillator 65 to create feedback signal 53 which is either in phase with oscillator 65 or 180° out of phase with the output of oscillator 65 (hence, BPSK modulation). Applicant respectfully submits this is readily apparent from the instant

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specification from pg. 9, ll. 16 to pg. 10, ll. 4, but upon request, Applicant can refer to several texts discussing digital modulation techniques. Based on the foregoing, reconsideration and withdrawal of this rejection are respectfully requested.

35 U.S.C. § 102

Claims 1-3, 10-12, 14, 17-21, 23 and 25-27 are finally rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. 5,392,042 to Pellon. Applicant respectfully traverses this rejection for the following reasons.

The Office Action alleges Pellon discloses all of the limitations of Applicant's claims; Applicant continues to disagree. The Office Action cites Fig. 2a and corresponding textual passages as teaching the majority of Applicant's claim limitations and subsequently jumps to column 11, lines 16-18, col. 20, ll. 26-40 and col. 21 ll. 40-51 as disclosing certain of Applicant's other claim limitations; namely subtracting a feedback signal from an IF signal.

Applicant respectfully points out that Figs. 1-6 of Pellon, and corresponding text, are entirely dedicated to describing the status of the prior art sigma-delta A/D converters whereas Figs. 7-10 and the corresponding descriptions of col. 11, 20 and 20 describe the Pellon invention which allegedly improves over the previously described prior art. In essence, the Office Action appears to be selectively choosing passages from Pellon without regard to which embodiments or prior art descriptions in Pellon to which they pertain. Applicant respectfully submits that it is improper to take the disclosure of prior art out of the context in which it is disclosed and in no event does not establish *prima facie* anticipation.

The fact remains that neither Pellon nor any prior art of record discloses or suggests *a portable communication device comprising an analog-to-digital converter to provide a digital output signal; a signal generator coupled to the digital output signal to generate a feedback signal; wherein the portable communication device is adapted to subtract the feedback signal*

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from an intermediate frequency (IF) signal, as recited in Applicant's independent claim 1 or similar limitations present in independent claims 11, 19 and 25.

As previously pointed out, prior art delta-sigma loops, such as those cited in regard to Pellon's prior art descriptions in Figs. 1-6, process an already down converted I or Q signal and thus there is no *subtracting of the feedback signal from an intermediate frequency (IF) signal*. The mention of potential direct IF signal processing by Pellon in regard to subsequent but distinctly different embodiments does not change this fact.

For the foregoing reasons, Pellon cannot anticipate claims 1, 11, 19 or 25 or the claims which depend there from and reconsideration and withdrawal of this rejection is respectfully requested.

35 U.S.C. § 103(a)

Claims 4-7, 9, 13, 15-16, 22 and 24 are finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Pellon in view of the cited 1988 publication by Sklar and/or in further view of U.S. 6,577,674 to Ko. Applicant respectfully traverses these rejections for the following reasons.

The Office Action relies on Pellon to disclose the features of the rejected claims as applied above and admits Pellon does not specify the signal generator to be a modulator, an amplitude shift key modulator, or a multiplier adapted to multiply a local oscillator and a received signal as recited in Applicant's claims.

The Office Action instead relies on Sklar and Ko to make up for these notable deficiencies alleging the combinations would be obvious for various reasons (e.g., that the Sklar modulator is analogous to the switching device described in Pellon; and/or to implement the multiplier and oscillator in Ko to further down convert). Applicant respectfully disagrees and submits that *prima facie* obviousness has not been established since (i) there is no proper motivation for combining the references as suggested; and (ii) even assuming it would be proper

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to combine the prior art as suggested, all the limitations present in Applicant's claims would not be taught or suggested.

(i) NO MOTIVATION TO COMBINE REFERENCES

Respectfully, it appears that the motivating factor for selectively picking and choosing elements from the cited references and combining them in piecemeal fashion is based on the improper hindsight of Applicant's invention as opposed to any teaching or suggestion in the references themselves.

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention when there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *In re Kotzab*, 217 F.3d 1365, 1370 (Fed. Cir. 2000). The mere fact that references can be combined or modified does not render the resultant combination obviousness unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990).

In the instant case, Applicant is unaware of any reason, the skilled artisan would replace the switches disclosed in Pellon with a modulator. On pg. 9, of the 8/8/2005 Final Office Action, the Examiner rebuts Applicant's point by alleging that "Sklar teaches implementing an ASK modulator as a switching device and this is analogous to the switching device described by Pellon, thus satisfying the limitations of the claim." Regardless, the Office Action has still failed to give any reason why one of ordinary skill in the art would bother replacing a switch in Pellon with an ASK modulator of Sklar and thus there is not even any attempt to provide any motivation why one of ordinary skill in the art would combine the references as suggested in the Office Action.

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Applicant respectfully submits that the discreet insertion of oscillators and/or multipliers within the circuit of Pellon appears solely for the purposes of rendering the instant rejection as opposed to any logical rationale by the skilled artisan or suggestion to do so by Sklar or Ko. Applicant respectfully submits that the reason these elements are missing from Pellon entirely is that the down conversion of signals is performed (if performed at all) prior to reaching the Sigma-Delta ADC disclosed in Figs. 1-6 of Pellon. Accordingly, there is no need for these elements in the Pellon system and thus weighs against the combination suggested in the Office Action.

(ii) ALL LIMITATIONS ARE NOT DISCLOSED

By virtue of Pellon not teaching or suggesting a device adapted to subtract the feedback signal from an IF signal discussed above, even when combining the prior art references as suggested in the Office Action, Applicant's recited limitations are not taught or suggested.

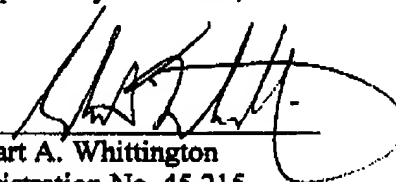
For all the foregoing reasons, Applicant submits the §103 rejections of record are improper and respectfully requests reconsideration and withdrawal of these rejections.

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CONCLUSION.

In view of the above, reconsideration and allowance of this application is now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below. Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee or deficiency thereof, except for the Issue Fee, is to be charged to **Deposit Account # 50-0221.**

Respectfully submitted,



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